

CLAIMS

1 - Three- or four-wheeled pedal-powered vehicle, characterized in that its chassis (3) comprises a central beam (10) and at least one horizontal frame (11, 12), fixed to the front side of the beam (10); the beam (10) includes different members of the vehicle, in particular the steering column (45) and a crankset support (18) located level with the axle of both front wheels (2), or slightly in front of or behind this axle, and mounted in such a way that each pedal is located on one side of the beam (10), said beam (10) being further connected to the rear wheel(s) (2); the frame(s) (11, 12) are dimensioned such that the user's feet and part of his/her legs are located inside these frame(s) during pedaling, the frame(s) forming, on each side, two stacked horizontal side members, onto which one of the front wheel(s) (2) of the vehicle is mounted.

2 - Vehicle according to claim 1, characterized in that it comprises a seat (5) mounted on the beam (10), conformed in order to receive the user in a substantially sitting position, slightly tilted rearwards.

3 - Vehicle according to claim 1 or claim 2, characterized in that each side of a frame (11, 12) comprises a suspension triangle (31) pivotably mounted relatively to it around a longitudinal axis, both triangles (31) located on a same side being connected to a part (41) including the wheel (2), and a damper (33) being placed between this part (41) and one of the side members of the frame(s) (11, 12).

4 - Vehicle according to anyone of claims 1 to 3, characterized in that the rear wheels (2) are mounted on an arm (13) pivotably connected at the rear end of the beam (10) so that this arm (13) may swing in a vertical plane, a damper (71) being placed between this swinging arm and the beam (10).

5 - Vehicle according to claim 4, characterized in that the vehicle comprises a primary transmission (6) formed by a chain (38) extending between at least one chainwheel of the crankset (27), and at least one pinion (56) coaxial with the pivot axis of the swinging arm (13), and a secondary transmission (7) formed by a chain (76) extending between at least one pinion (60) rotationally integral with the pinion(s) (56) of the primary transmission (6), and at least one pinion (75) rotationally integral with the rear wheel(s).

6 - Vehicle according to anyone of claims 1 to 5, characterized in that the beam (10) or the swinging rear arm (13), comprises a transverse bore (64) which may receive either a

short shaft (66) supporting a single rear wheel (2), or a long shaft (65) which may receive two wheels (2).

7 – Vehicle according to anyone of claims 1 to 6, characterized in that it comprises a tilted steering column (45).

5 8 – Vehicle according to claim 7, characterized in that it comprises means (28, 29, 50) for adjusting the length and/or the tilt of this steering column (45).

9 – Vehicle according to anyone of claims 1 to 8, characterized in that the beam (10) (10) includes a series of holes making it possible to adjust the position of the crankset (27) (27) according to the morphology of the user.

10 10 – Vehicle according to anyone of claims 4 to 9, characterized in that the arm (13) includes a series of holes making it possible to adjust the tilt of the damper (71) and consequently the stiffness of the rear suspension formed by this damper, as well as the height of the rear part of the vehicle.

15 11 – Vehicle according to anyone of claims 1 to 10, characterized in that it includes means (85 to 87) making it possible to adjust the height of the seat (5) as well as the longitudinal position of this seat (5).